



ELECTRODES FOR WELDING STAINLESS AND HEAT-RESISTING STEELS

# GEMINI 680

## Typical Applications And Characteristics

GEMINI 680 is a rutile austenitic-ferritic coated electrode with a 25-30 % ferrite content. The weld metal is extremely crack resistant and lends itself admirably to the welding of dissimilar and “difficult to weld” steels. It can be used for the welding of high nickel alloys without becoming fully austenitic due to nickel pick-up.

### Typical All-Weld Metal Properties

Composition (%)		Mechanical	
C	0.10	0.2 % Proof Stress	550 N/mm <sup>2</sup>
Mn	1.00	Tensile strength	750 N/mm <sup>2</sup>
Si	0.90	Elongation (5xd)	23 %
Ni	10.00	Impact strength ISO-V@+20 °C	70 Joule
Cr	29.00	Ferrite level	35 %

### Typical welding current

AC or DC+				
Ø/L (mm)	2.6/300	3.2/350	4.0/350	5.0/350
Current min/max (A)	50/75	75/110	110/150	140/190

International Standard		Color	End	Green
AWS A5.4	E 312-16	Coding	Side	Green
ISO 3581	E 29 9 R 26	Printing	G-680/E 312-16	
DIN 8556	E 29 9 R 26	Welding Positions	Flat, horizontal, vertical-up and overhead	